Fig. 1

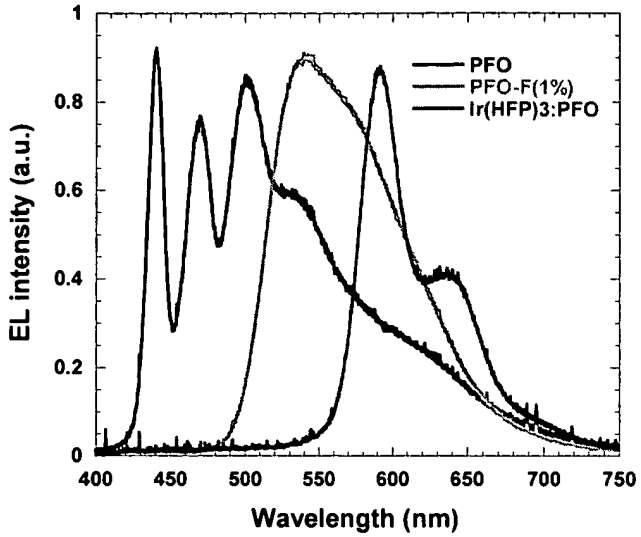

PFO
PFO-F(1%)
Ir(HFP)3:PFO
EL intensity (a.u.)
Wavelength (nm)
0
0.2
0.4
0.6
0.8
1
400
450
500
550
600
650
700
750

Fig. 2

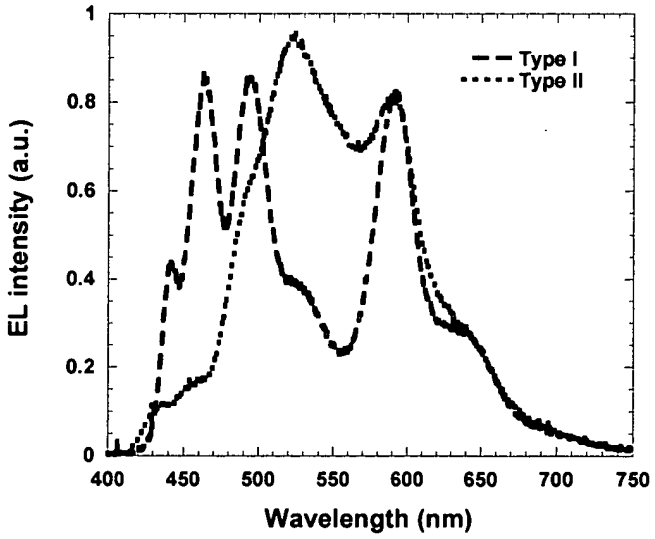

Type I
Type II
EL intensity (a.u.)
Wavelength (nm)
0
0.2
0.4
0.6
0.8
1
400
450
500
550
600
650
700
750

Fig. 3

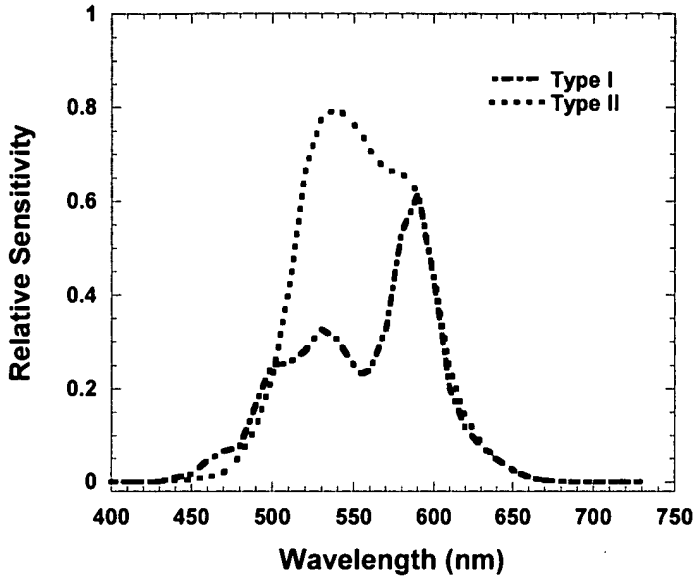

Relative Sensitivity
Wavelength (nm)
Type I
Type II
0
0.2
0.4
0.6
0.8
1
400
450
500
550
600
650
700
750

Fig. 4

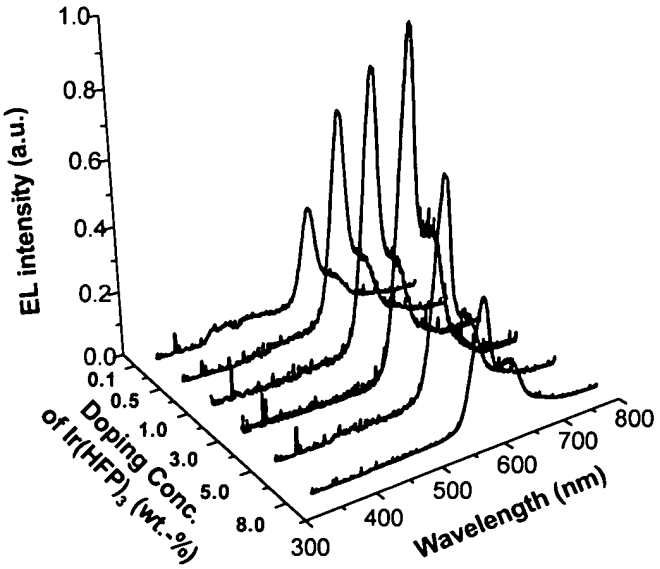

EL intensity (a.u.)
Doping Conc. of Ir(HFP)3 (wt.-%)
Wavelength (nm)
0.0
0.2
0.4
0.6
0.8
1.0
0.1
0.5
1.0
3.0
5.0
8.0
300
400
500
600
700
800

Fig. 5

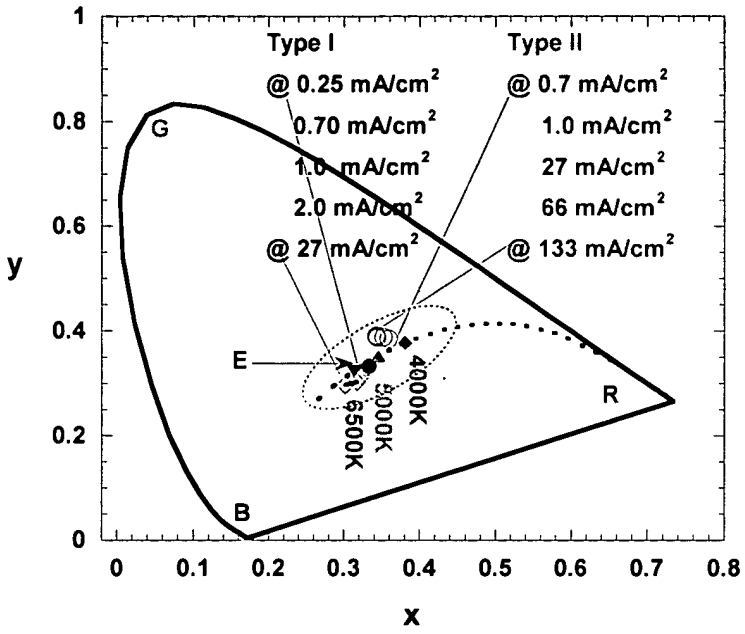

Type I
Type II
@ 0.25 mA/cm²
0.70 mA/cm²
1.0 mA/cm²
2.0 mA/cm²
@ 27 mA/cm²
@ 0.7 mA/cm²
1.0 mA/cm²
27 mA/cm²
66 mA/cm²
@ 133 mA/cm²
G
E
R
B
4000K
5000K
6500K
y
x
0
0.2
0.4
0.6
0.8
1
0.1
0.3
0.5
0.7

Fig. 6

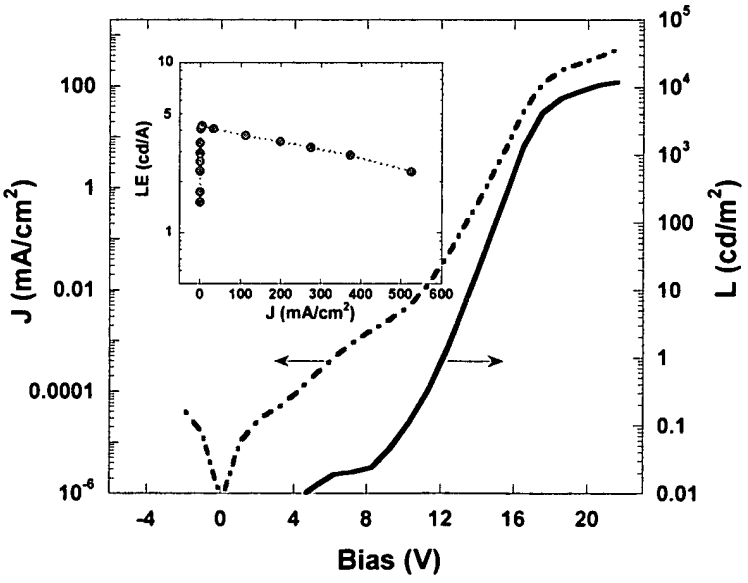

J (mA/cm²)
L (cd/m²)
Bias (V)
LE (cd/A)
J (mA/cm²)
100
1
0.01
0.0001
10⁻⁶
10⁵
10⁴
10³
100
10
1
0.1
0.01
-4
0
4
8
12
16
20
0
100
200
300
400
500
600
5
10

Fig. 7

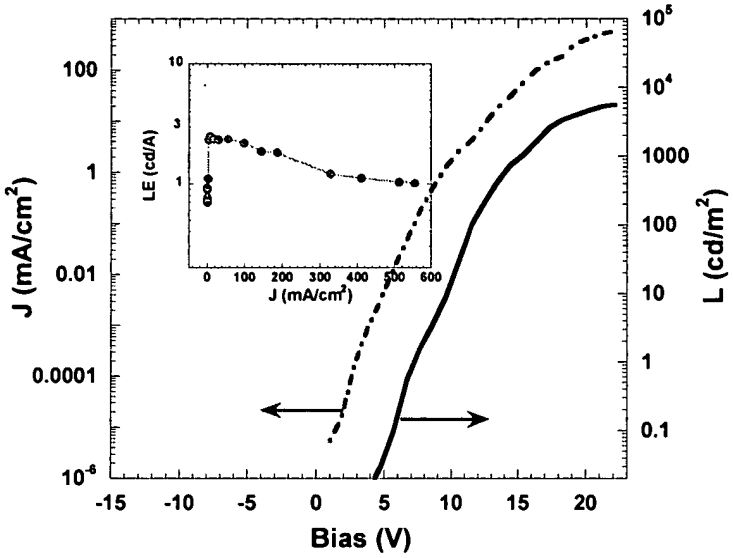
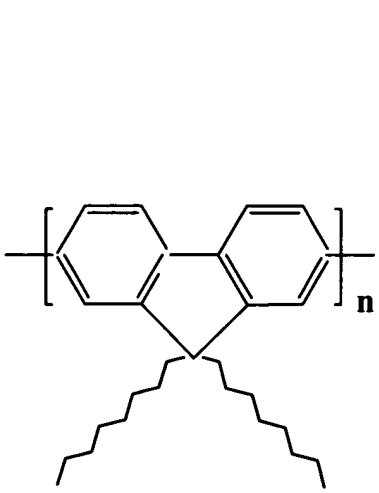
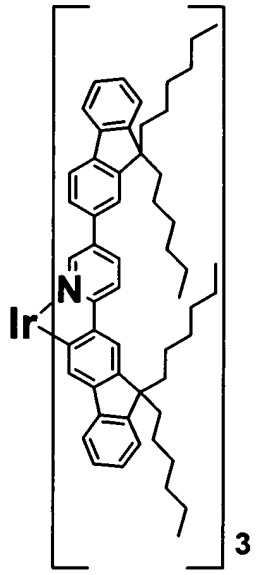

J (mA/cm^2)
L (cd/m^2)
Bias (V)
LE (cd/A)
J (mA/cm^2)
100
1
0.01
0.0001
10^{-6}
10^5
10^4
1000
100
10
1
0.1
-15
-10
-5
0
5
10
15
20
10
3
1
0
100
200
300
400
500
600

Fig. 8

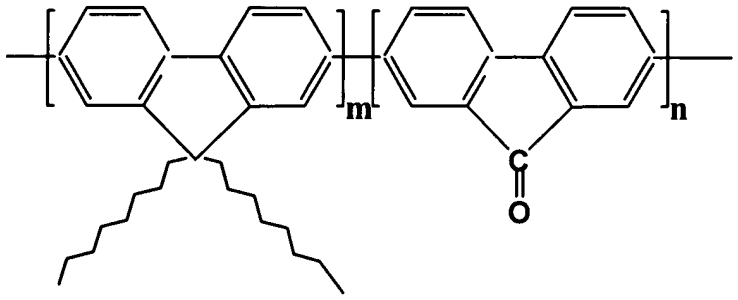
Molecular structures



PFO

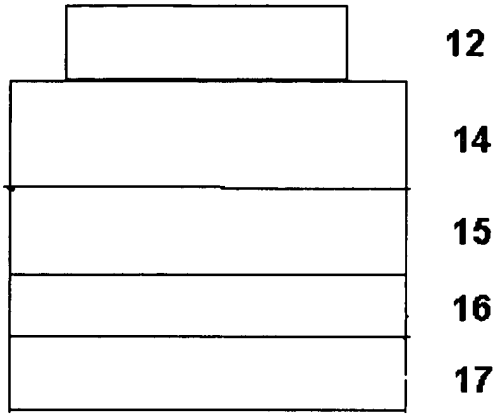


$Ir(HFP)_3$



m=99 and n=1

PFO-F (1%)

Fig. 9

Device configuration